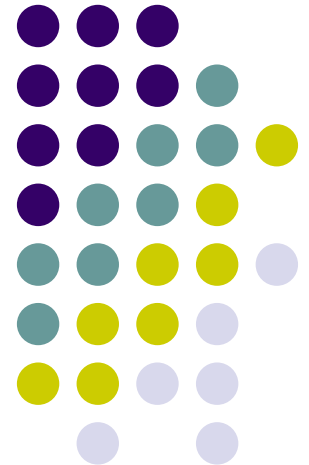


TN Mandatory Reporting Law

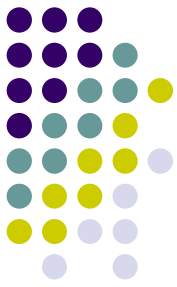
Legislation and Rule Changes

Marion Kainer MD MPH

Tennessee Department of Health



Acknowledgements

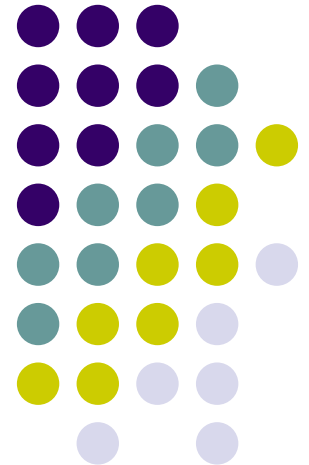


- **Vicki Brinsko (Vanderbilt University)**
- **Teresa Horan (CDC, DHQP)**

For sharing their slides

Mandatory Reporting of HAI

The National Landscape



Grassroots Campaign



- **Consumers Union – Political Activist arm of the “Consumer’s Report Magazine” based in Austin TX**
- **Web site www.stophospitalinfections.org**
- **News Programs and special 20/20 and “60 Minutes” feature stories on hospitals “hiding” infections from the public**
- **Sample e-mails to legislators, sample Mandatory Reporting bills consumers can download and send to legislators**

Sample Legislation



Consumers Union
Model Hospital Infections Disclosure Act
December 2006

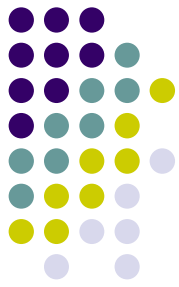
Section 1. Short title. This Act may be cited as the Hospital Infections Disclosure Act.

Section 2. Definitions. For purposes of this Act:

(a) “Department” means the Department of _____ [Note to advocates: your state may have several possible agencies to collect the data. These could be your state hospital licensing agency, your state health care data collection agency, or your state public health agency. If it exists in your state, we recommend using the agency that currently collects patient discharge data from hospitals. This will minimize the state’s cost to implement the bill, as these agencies tend to be more experienced with gathering patient-level data from hospitals and in providing quality of care information to the public.]

(b) “Hospital” means an acute care health care facility licensed under the Hospital Licensing Act [Note to advocates: insert a cross-reference and/or citation to the definition of “acute care hospital” in your state hospital licensing law. You should also consider including hospital-affiliated and freestanding outpatient or

Other Websites



- **Betsy McCaughey, PhD - former Lt Gov NY – founder of Reduce Infection Deaths (RID)**
- **Advocates Hospital Report Cards**
- **Has model legislation on website**

<http://www.hospitalinfection.org/contact.shtml>

Centers for Disease Control and Prevention (CDC)



- **Healthcare Infection Control Advisory Committee (HICPAC) published recommendations 2/2005**
- **Tried to provide a framework for Public Reporting of Healthcare Associated Infections**

HICPAC Guideline on Public Reporting of Healthcare-associated Infections (HAIs)



- **Insufficient evidence to recommend for or against public reporting of HAIs: no recommendation has been made for or against**
- **Document is HICPAC's consensus opinion**
- **A guide to best practices**
- **A starting point in the process of public disclosure of HAIs**
- **Endorsed by APIC, SHEA and CSTE**

HICPAC Recommendations



- 1. Use established public health surveillance methods when designing and implementing mandatory HAI reporting systems**
- 2. Create a multidisciplinary advisory panel to monitor the planning and oversight of the operations and products of HAI public reporting systems**
- 3. Choose appropriate process and outcome measures based on facility type and phase in measures over time to allow time for facilities to adapt and to permit ongoing evaluation of data validity**
- 4. Provide regular and confidential feedback of performance data to healthcare providers**

1. Use established public health surveillance methods

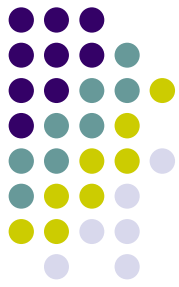


- **Select appropriate events or risk-adjusted event rates to monitor**
- **Select appropriate patient populations to monitor**
- **Use standardized case-finding methods and data validity checks**
- **Provide adequate support and resources**
- **Produce useful and accessible reports for stakeholders.**
- ***Do not use hospital discharge diagnostic codes as the primary data source for HAI public reporting systems.***



3. Choose appropriate process and outcome measures based on facility type

- Phase in measures over time
- Maximize acceptability to providers
- Maximize usefulness to consumers
- Three process measures
- Two outcomes measure



Process vs Outcome



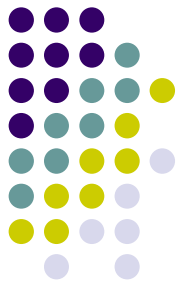
- Process measures monitor activities leading up to an event
 - Antibiotic timing
 - Central line insertion protocol
- Outcome measures infection rates
 - Link to process measures



PREVENTION IS PRIMARY!

*Protect patients...protect healthcare personnel...
promote quality healthcare!*

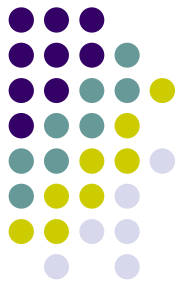
Division of Healthcare Quality Promotion



Examples States can use

- **Process measures**
 - **Central line insertion practices**
 - **Surgical antimicrobial prophylaxis**
 - **Influenza vaccination coverage**
 - **Hand hygiene monitoring**
- **Outcome measures**
 - **Central-line associated laboratory confirmed BSI**
 - **Surgical site infections**

Points to Consider



- **Data collection will vary from hospital to hospital – UNLESS you have uniform definitions, software, and training**
- **Different hospitals serve different patient populations (Risk adjustment)**
- **Better reporters may appear worse**

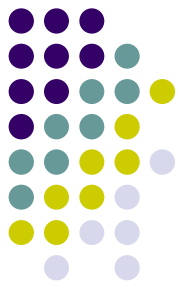
Potential Benefits of a Public Reporting System for Healthcare-associated Infections



- **Better informed public**
- **Better informed providers**
- **Greater accountability**
- **More attention on prevention**
- **Increased resources for infection control programs**



Potential Unintended Consequences of a Public Reporting System for Healthcare-associated Infections



- **Diversion of healthcare resources to data collection and away from the bedside and prevention**
- **Focus only on the events being reported**
- **Hospitals avoiding high-risk patients**



Risk Adjustment I

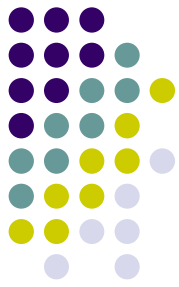
- **To compare infection rates between hospitals, risk adjustment is necessary**
- **Facility's site-specific infection rates are subject to a wide variety of factors that are unique to a specific institution**
 - **the types of patients being served**
 - **e.g., infants, children , adults, and the elderly**
 - **the patients' underlying medical conditions (such as diabetes, HIV infection, cancer, trauma or burns)**

Risk Adjustment II



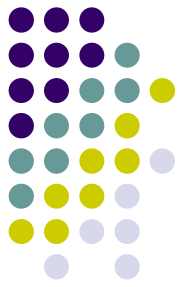
- **the types and complexity of treatments and procedures performed by a healthcare institution.**
- **As an example, a hospital that cares for a large number of immune-suppressed patients or a hospital that performs transplant surgeries might have higher infection rates than a small community hospital due to the types of patients and services they provide.**

Mandatory Reporting of HAIs in Tennessee



- **Bills introduced in 2005 and 2006**
- **Study committee was mandated to be formed**

TN Multidisciplinary Committee

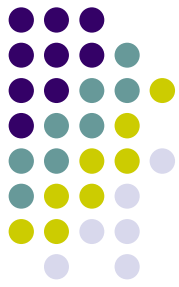


- **Tennesseans Improving Patient Safety (TIPS) subcommittee**
- **Infection Control and APIC members from across the state**
- **Consumers invited**
- **Insurance industry representatives**
- **State Health Department representatives**
- **Tennessee Hospital Association representatives**

TIPS Subcommittee Recommendations

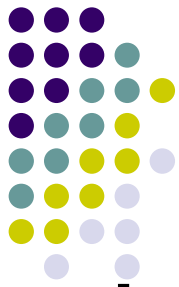


- **Phase in measures over time**
- **Maximize acceptability to providers**
- **Maximize usefulness to consumers**
- **Process measures**
- **Outcomes measure**



Committee Recommendations

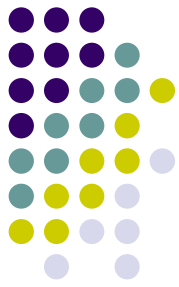
- **All institutions that deliver health care in the state of Tennessee (inpatient/outpatient) ambulatory surgical centers, free standing surgical centers, long term care facilities, rehab centers**
- **Exception: facilities with an average daily census of less than 25**
- **All facilities join NHCN when available**



Outcomes Measures

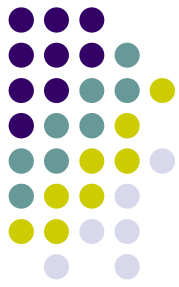
- **Central-line associated laboratory confirmed bloodstream infections through NHSN**
 - **ICUs only (including NICU)**
 - **Exclude Burn ICU and Level I Trauma Units**
- **Report all surgical site infections associated with CABG to the State Health Department – not to be reported publicly**
- **Unusual Event Reporting code 808, surgical site infections clarification**

Committee Recommendations



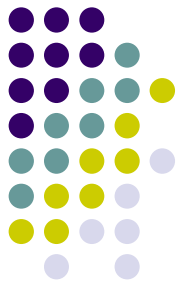
- **Change Interpretive Guidelines for Reporting Unusual Events**
- **Report only those SSIs that truly are unusual – cause death or permanent damage**
- **Reflect Language of JCAHO Sentinel Events Policy at www.jcaho.org**
 - **Unexpected occurrence involving death or physical injury**

Mandatory Reporting of HAIs in Tennessee

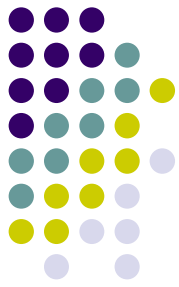


- **SB 2978/HB 3067 passed and signed by Governor June 20, 2006**

Who Reports?



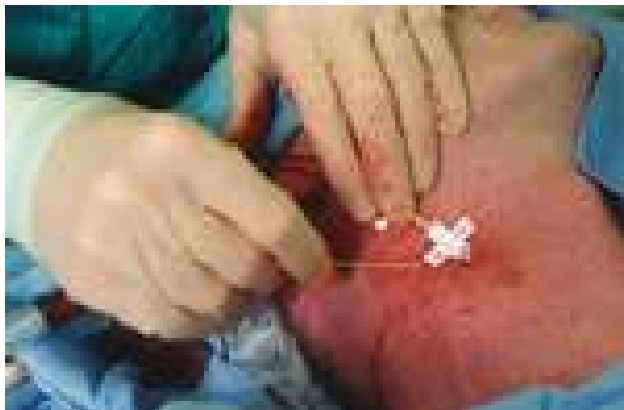
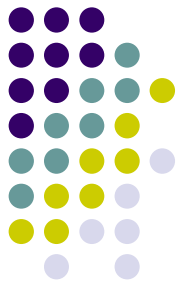
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- **Exception: facilities with an average daily census of less than 25**
- **All facilities join NHCN when available**



What is Reported?

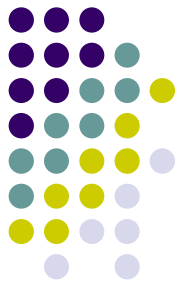
- ❑ **Central-line associated laboratory confirmed bloodstream infections through NHSN**
 - **ICUs only (including NICU)**
 - **Exclude Burn ICU and Level I Trauma Units**
- **Report surgical site infections associated with CABG to the State Health Department – (only reported in aggregate form (not via individual healthcare facility))**

Central Line Associated Bloodstream Infections

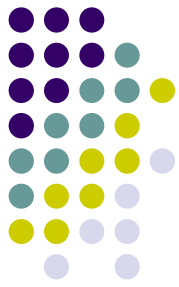


- **Use CDC definitions for central line associated bloodstream infections.**
- **Report through NHSN**
- **Use NHSN forms**
- **On-line training, webinars, and regional training**
- **Hands-on training at a computer with NHSN experienced mentors**

NHSN Requirements for Device-associated Module



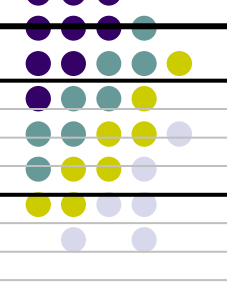
- **Perform surveillance in at least one location for at least six calendar months**
 - **Tennessee requires 12 months, all ICUs (except Level I Trauma and Burn ICUs)**
- **Use CDC infection and device definitions**
- **Provide appropriately collected denominators (patient days and device days)**
- **Provide the required antibiogram for each organism identified**



What is a Denominator?



- **Daily count of all patients in that ICU who have at least one central line**
- **Central Line infection rates are determined by dividing the number of infections (in that ICU) by the denominator (number of patients with a central line)**



*required for saving	**required for completion	
*Facility ID#:	*Event #:	
*Patient ID#:	Social Security #:	
Secondary ID#:		
Patient Name, Last:	First:	Middle:
*Gender: F M	*Date of Birth:	
*Event Type: BSI	*Date of Event:	
*Post-procedure BSI: Yes No	Date of Procedure:	
NHSN Procedure Code:	ICD-9-CM Code:	
*Location:	*Date Admitted to Facility:	

Risk Factors

*If ICU/Other locations, Central line:	Yes	No
*If Specialty Care Area,		
Permanent central line:	Yes	No
Temporary central line:	Yes	No
*If NICU,		
Central line:	Yes	No

Event Details

Umbilical catheter:	Yes	No
---------------------	-----	----

*Specific Event: (check one) Laboratory-confirmed or Clinical sepsis

Laboratory-confirmed: No infection at another site + (check one pathway below)

Recognized pathogens: ≥ 1 blood culture positive

Other organisms: ≥ 2 blood cultures from separate sites positive w/same organism + clinical sx

Other organisms: ≥ 1 blood culture positive in pt with IV + clinical sx + antimicrobial therapy

**Died: Yes No	Clinical sepsis: ≥ 1 clinical symptom + blood culture positive	BSI contributed to Death: Yes No	BSI contributed to Death at another site: Yes No	+ antimicrobial therapy
----------------	---	----------------------------------	--	-------------------------

Discharge Date:	*Pathogens Identified: Yes No
-----------------	-------------------------------

*If Yes, specify on page 2 ➔

Custom Fields

Label	Label
CL Insertion Date _____ / ____ / ____	_____ / ____ / ____
CL Type _____	_____
Peripheral IV (Y/N) _____	_____
TPN (Y/N) _____	_____
_____	_____
_____	_____

Comments

Pathogen #	Gram-positive Organisms										
_____	Coagulase-negative staphylococci	VANC									
		S I R N									
_____	<i>Enterococcus faecalis</i>	AMP	DAPTO	LNZ	PENG	VANC					
		S I R N	S I R N	S I R N	S I R N	S I R N					
_____	<i>Enterococcus faecium</i>	AMP	DAPTO	LNZ	PENG	QUIDAL	VANC				
		S I R N	S I R N	S I R N	S I R N	S I R N	S I R N				
_____	<i>Staphylococcus aureus</i>	CLIND	DAPTO	ERYTH	GENT	LNZ	OX	QUIDAL	RIF	TMZ	VANC
		S I R N	S I R N	S I R N	S I R N	S I R N	S I R N	S I R N	S I R N	S I R N	S I R N

Pathogen #	Gram-negative Organisms										
_____	<i>Acinetobacter</i> spp. (specify)	AMK	AMPSUL	CEFEP	CEFTAZ	CIPRO	IMI	LEVO	MERO	PIPTAZ	
		S I R N	S I R N	S I R N	S I R N	S I R N	S I R N	S I R N	S I R N	S I R N	
_____	<i>Escherichia coli</i>	AMK	CEFEP	CEFOT	CEFTAZ	CEFTRX	CIPRO	IMI	LEVO	MERO	
		S I R N	S I R N	S I R N	S I R N	S I R N	S I R N	S I R N	S I R N	S I R N	
_____	<i>Enterobacter</i> spp. (specify)	AMK	CEFEP	CEFOT	CEFTAZ	CEFTRX	CIPRO	IMI	LEVO	MERO	
		S I R N	S I R N	S I R N	S I R N	S I R N	S I R N	S I R N	S I R N	S I R N	
_____	<i>Klebsiella oxytoca</i>	AMK	CEFEP	CEFOT	CEFTAZ	CEFTRX	CIPRO	IMI	LEVO	MERO	
		S I R N	S I R N	S I R N	S I R N	S I R N	S I R N	S I R N	S I R N	S I R N	
_____	<i>Klebsiella pneumoniae</i>	AMK	CEFEP	CEFOT	CEFTAZ	CEFTRX	CIPRO	IMI	LEVO	MERO	
		S I R N	S I R N	S I R N	S I R N	S I R N	S I R N	S I R N	S I R N	S I R N	
_____	<i>Serratia marcescens</i>	AMK	CEFEP	CEFOT	CEFTAZ	CEFTRX	CIPRO	IMI	LEVO	MERO	
		S I R N	S I R N	S I R N	S I R N	S I R N	S I R N	S I R N	S I R N	S I R N	
_____	<i>Pseudomonas aeruginosa</i>	AMK	CEFEP		CEFTAZ	CIPRO	IMI	LEVO	MERO	PIP	
		S I R N	S I R N		S I R N	S I R N	S I R N	S I R N	S I R N	S I R N	
_____	<i>Stenotrophomonas maltophilia</i>	TMZ									
		S I R N									

Pathogen #	Other Organisms										
_____	Organism 1 (specify)	Drug 1	Drug 2	Drug 3	Drug 4	Drug 5	Drug 6	Drug 7	Drug 8	Drug 9	
		S I R N	S I R N	S I R N	S I R N	S I R N	S I R N	S I R N	S I R N	S I R N	
_____	Organism 2 (specify)	Drug 1	Drug 2	Drug 3	Drug 4	Drug 5	Drug 6	Drug 7	Drug 8	Drug 9	
		S I R N	S I R N	S I R N	S I R N	S I R N	S I R N	S I R N	S I R N	S I R N	
_____	Organism 3 (specify)	Drug 1	Drug 2	Drug 3	Drug 4	Drug 5	Drug 6	Drug 7	Drug 8	Drug 9	
		S I R N	S I R N	S I R N	S I R N	S I R N	S I R N	S I R N	S I R N	S I R N	

Drug Codes:

 AMK = amikacin
 AMP = ampicillin
 AMPSUL = ampicillin/sulbactam
 CEFEP = cefepime
Result Codes:
 S = Susceptible

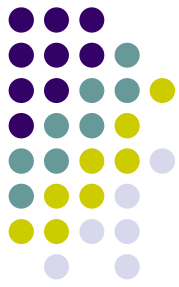
 CEFOT = cefotaxime
 CEFTAZ = ceftazidime
 CEFTRX = ceftriaxone
 CIPRO = ciprofloxacin
 CLIND = clindamycin
 I = Intermediate

 DAPTO = daptomycin
 ERYTH = erythromycin
 GENT = gentamicin
 IMI = imipenem
 LEVO = levofloxacin
 R = Resistant

 LNZ = linezolid
 MERO = meropenem
 OX = oxacillin
 PENG = penicillin G
 PIP = piperacillin
 N = not tested

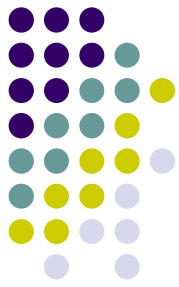
 PIPTAZ = piperacillin/tazobactam
 QUIDAL = quinupristin/dalfopristin
 RIF = rifampin
 TMZ = trimethoprim/sulfamethoxazole
 VANC = vancomycin

NHSN Forms



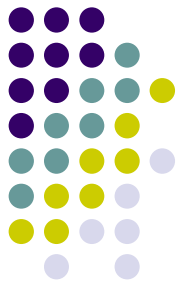
- **ICP fills out form**
- **ICP enters form into NHSN software database OR**
- **IC secretary/clerical support person enters data**
- **Also consider other existing infection control data bases**

NSHN & Other IC Databases



- **CDC is working with major vendors to try to link the outside data base to NHSN in order that data will not have to be entered twice**
- **Health Level 7 (HL7) is a computer standard that allows for healthcare data to be exchanged from different systems.**
- **Many IC software vendors are not HL7 compatible**
- **NHSN is HL7 ready**

Reporting CABG Infections



- **All hospitals that perform Coronary Artery Bypass Grafting (CABG) will report infection rates to the TDH**
- **Reporting will occur through NHSN**



Requirements for CABG Reporting

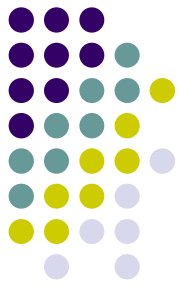
- **Must report CBGB (Coronary Bypass Graft) – Both - chest and leg incisions**
- **Must report CBGC (Coronary Bypass Graft) –Chest only**
- **Sternal Wound infections are the Primary Site**
 - **Superficial or Mediastinitis or Osteomyelitis, NOT Deep incisional**
- **Leg or Arm donor site infections are recorded as Secondary Sites**

Committee Process Measures Recommendations: Rule Change



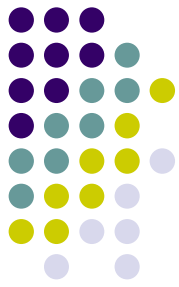
- **CVC insertion technique**
- **Hand Hygiene Monitoring**
- **Influenza Vaccination Program**
- ***Antibiotic Timing (CMS: SCIP, not rule change)***

Rule Change: CVC Insertion



- **The facility shall develop and implement a system for measuring improvements in adherence to CVC insertion process**

CVC Insertion Process Key Components



- Hand hygiene
- Maximal barrier precautions
- CHG skin asepsis
- Optimal site selection
- Daily review of line necessity
- Utilization of an insertion check list

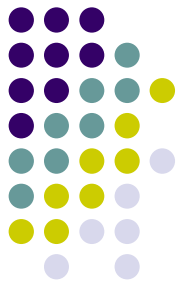
1. Patient name	_____	Room	_____
2. Date	_____	Time	_____
3. Site	_____	Side	_____
4. Catheter type	_____	Size	_____
5. Indication for insertion	_____		
6. Pre-procedure checklist	Yes	No	Not applicable
Hand hygiene	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Maximal barrier precautions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CHG skin asepsis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Optimal site selection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Daily review of line necessity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Utilization of an insertion check list	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Hand Hygiene



- **Essential for preventing Infections**
- **Add monitoring of Hand Hygiene to Rules section along with annual education**

Rule Change: Hand Hygiene



- **All facilities must have a program in place to measure adherence to Hand Hygiene**
- **Use of regular or antimicrobial soaps or alcohol gel**
- **Direct care giver education**

Hand Hygiene Education



- Types of activities that result in hand contamination
- Advantages and disadvantages of the various methods of hand hygiene
- Potential risks of HCW colonization or infections caused by organisms acquired from patients
- Morbidity and mortality of HAI

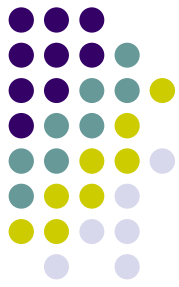
Rule Change: Preventing Influenza



- **Influenza causes 36,000 deaths annually and 226,00 hospitalizations in the US**
- **HCW can acquire influenza and transmit it to their patients**
- **Influenza vaccination OR a signed declination statement due each December**

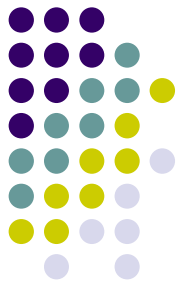


Rules Change: Influenza Vaccination Program



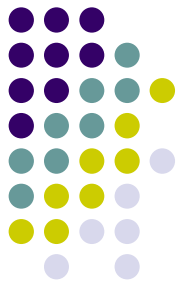
- Offer influenza vaccination to all staff and Licensed Independent Practitioners
- Accept evidence of receiving vaccine from another source
- Signed declination statement for those who refuse

Influenza Education



- **Educate all direct patient care givers**
 - **Flu vaccination**
 - **Non-vaccine control measures**
 - **Diagnosis, transmission, and potential impact of influenza**

Influenza Program



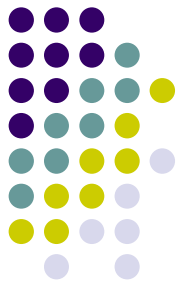
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"We're out of flu vaccine.
Try licking some virus software."

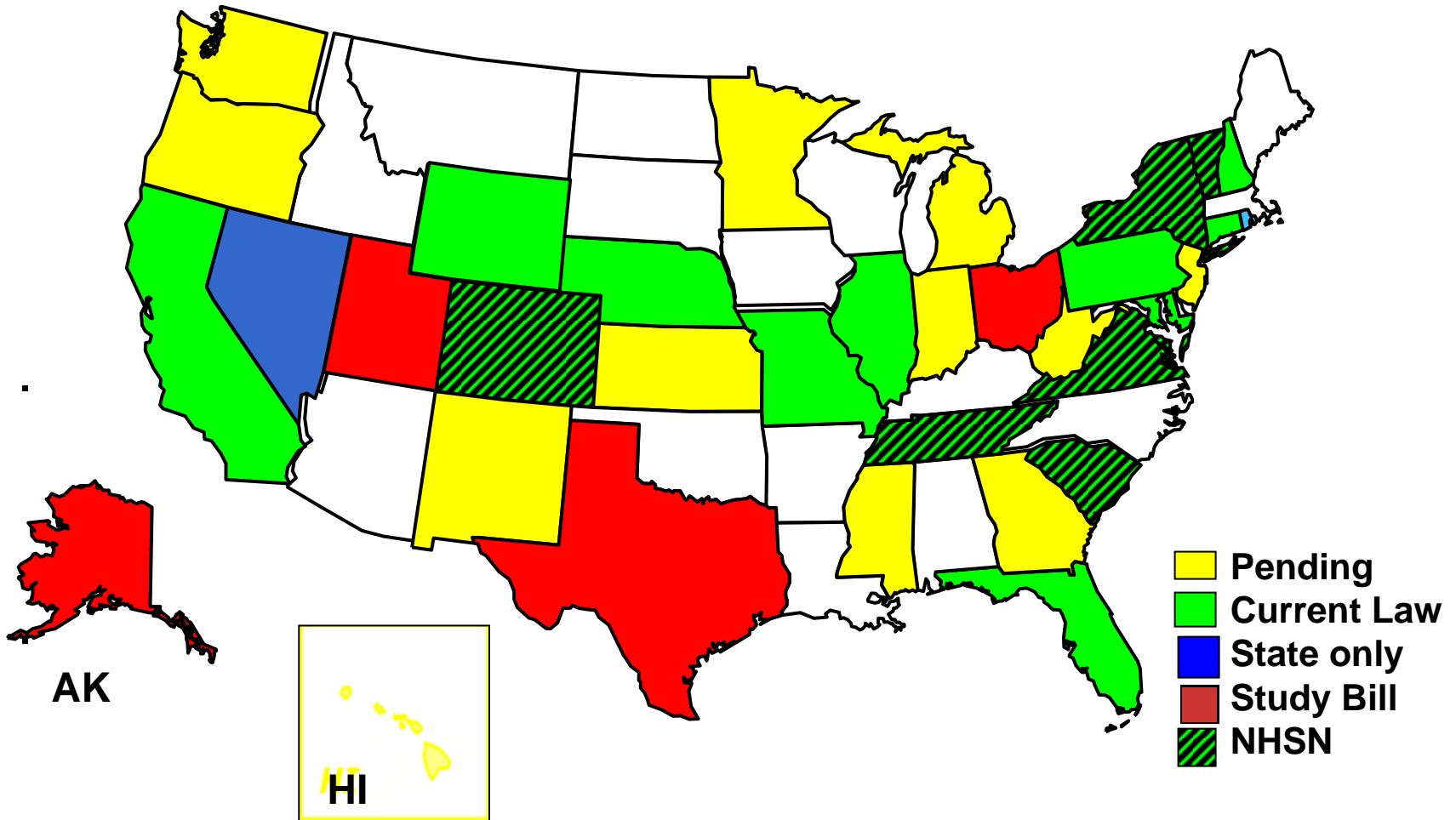
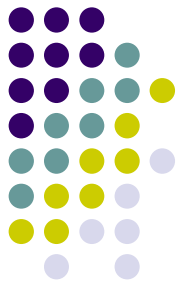
- Facilities must have an annual evaluation of their program and reasons for refusal
- If a vaccine shortage occurs, the Medical Director will suspend requirements to complete vaccinations or declination statements

Implementation



- **General training session followed by hands on computer training (July 2007)**
- **Apply for Digital Certificate after computer training session**
- **Ready to report by October 2007**
- **MI, NY and VA are already reporting through NHSN**

Those States Using NHSN to Report



Questions

